

CLAIMS

What is claimed is:

1. A multi-server rack comprising at least one frame for housing servers, the servers having power, keyboard, video, and mouse (K/V/M), and universal serial bus (USB) connections; a server power consolidator attached to the at least one frame that connects with and consolidates the servers' respective power connections; and a server K/V/M and USB connection concentrator attached to the at least one frame that connects with and consolidates the servers' respective K/V/M and USB connections.

2. The multi-server rack of claim 1 wherein the server power consolidator includes power connectors located on the power consolidator for connecting to the servers' power connections and at least one consolidated power connection for connecting power to the power consolidator.

3. The multi-server rack of claim 1 wherein the server K/V/M and USB connection concentrator includes K/V/M and USB connections located on the connection concentrator for connecting to K/V/M and USB connections on each of the servers and a consolidated K/V/M and USB connection located on the connection concentrator, the consolidated K/V/M and USB connections allowing one connector to be used for selective communication with the servers' K/V/M and USB connections.

4. The multi-server rack of claim 1 wherein the frame further comprises at least one frame network panel; the servers further include network connections; and wherein frame network connectors connect the servers' network connections to network connections on the at least one

4 frame network panel such that outside network connectors may connect with the network panel
5 connections and thus be connected with the servers' network connections.

1 5. The multi-server rack of claim 1 wherein the servers have network connections and the
2 server K/V/M and USB connection concentrator further connects with and consolidates the
3 servers' respective network connections

1 6. The multi-server rack of claim 5 wherein the server K/V/M and USB connection
2 concentrator includes network connections located on the connection concentrator for connecting
3 to the network connections on each of the servers and a consolidated network connection located
4 on the connection concentrator, the consolidated network connection allowing one connector to be
5 used for selective communication with the servers' network connections.

1 7. The multi-server rack of claim 1 wherein the servers have parallel port connections and the
2 server K/V/M and USB connection concentrator further connects with and consolidates the
3 servers' respective parallel port connections

1 8. The multi-server rack of claim 7 wherein the server K/V/M and USB connection
2 concentrator includes parallel port connections located on the connection concentrator for
3 connecting to the parallel port connections on each of the servers and a consolidated parallel port
4 connection located on the connection concentrator, the consolidated parallel port connection
5 allowing one connector to be used for selective communication with the servers' parallel port
6 connections.

1 9. The multi-server rack of claim 1 wherein the servers have serial port connections and the
2 server K/V/M and USB connection concentrator further connects with and consolidates the
3 servers' respective serial port connections

1 10. The multi-server rack of claim 9 wherein the server K/V/M and USB connection
2 concentrator includes serial port connections located on the connection concentrator for connecting
3 to the serial port connections on each of the servers and a consolidated serial port connection
4 located on the connection concentrator, the consolidated serial port connection allowing one
5 connector to be used for selective communication with the servers' serial port connections.

1 11. A multi-server frame for housing servers, the servers having power, keyboard, video, and
2 mouse (K/V/M), and universal serial bus (USB) connections; a server power consolidator attached
3 to the frame that connects with and consolidates the servers' respective power connections; and a
4 server K/V/M and USB connection concentrator attached to the frame that connects with and
5 consolidates the servers' respective K/V/M and USB connections.

1 12. The multi-server frame of claim 12 wherein the server power consolidator includes power
2 connectors located on the power consolidator for connecting to the servers' power connections and
3 at least one consolidated power connection for connecting power to the power consolidator.

1 13. The multi-server frame of claim 11 wherein the server K/V/M and USB connection
2 concentrator includes K/V/M and USB connections located on the connection concentrator for
3 connecting to K/V/M and USB connections on each of the servers and a consolidated K/V/M and

4 USB connection located on the connection concentrator, the consolidated K/V/M and USB
5 connections allowing one connector to be used for selective communication with the servers'
6 K/V/M and USB connections.

1 14. The multi-server frame of claim 11 wherein the frame further comprises at least one frame
2 network panel; the servers further include network connections; and wherein frame network
3 connectors connect the servers' network connections to network connections on the at least one
4 frame network panel such that outside network connectors may connect with the network panel
5 connections and thus be connected with the servers' network connections.

1 15. The multi-server frame of claim 1 wherein the servers have network connections and the
2 server K/V/M and USB connection concentrator further connects with and consolidates the
3 servers' respective network connections

1 16. The multi-server frame of claim 15 wherein the server K/V/M and USB connection
2 concentrator includes network connections located on the connection concentrator for connecting
3 to the network connections on each of the servers and a consolidated network connection located
4 on the connection concentrator, the consolidated network connection allowing one connector to be
5 used for selective communication with the servers' network connections.

1 17. The multi-server frame of claim 11 wherein the servers have parallel port connections and
2 the server K/V/M and USB connection concentrator further connects with and consolidates the
3 servers' respective parallel port connections

1 18. The multi-server frame of claim 17 wherein the server K/V/M and USB connection
2 concentrator includes parallel port connections located on the connection concentrator for
3 connecting to the parallel port connections on each of the servers and a consolidated parallel port
4 connection located on the connection concentrator, the consolidated parallel port connection
5 allowing one connector to be used for selective communication with the servers' parallel port
6 connections.

1 19. The multi-server frame of claim 11 wherein the servers have serial port connections and the
2 server K/V/M and USB connection concentrator further connects with and consolidates the
3 servers' respective serial port connections

1 20. The multi-server frame of claim 19 wherein the server K/V/M and USB connection
2 concentrator includes serial port connections located on the connection concentrator for connecting
3 to the serial port connections on each of the servers and a consolidated serial port connection
4 located on the connection concentrator, the consolidated serial port connection allowing one
5 connector to be used for selective communication with the servers' serial port connections.

1 21. The multi-server frame of claim 11 wherein the multi-server frame further includes mounts
2 for mounting the frame into a server rack.

1 22. The method of connecting at least one server to a host computer comprising consolidating
2 power connections for each server into a consolidated power connection; consolidating keyboard,
3 video, and mouse (K/V/M) and universal serial bus (USB) connections for each server into at least

4 one switch each for the consolidated K/V/M and USB connections; connecting the consolidated
5 power connection and K/V/M and USB switches to the host computer; selectively communicating
6 between the host computer and a servers' K/V/M and USB connections using the consolidated
7 connection switches.

1 23. The method of claim 22 further comprising consolidating serial port connections for each
2 server into at least one consolidated serial port connection switch; connecting the consolidated
3 serial port connection switch to the host computer; selectively communicating between the host
4 computer and a server's serial port connector using the consolidated serial port connector switch.

1 24. The method of claim 22 further comprising consolidating parallel port connectors for each
2 server into at least one consolidated parallel port connector switch; connecting the consolidated
3 parallel port connector switch to the host computer; selectively communicating between the host
4 computer and a server's parallel port connector using the consolidated parallel port connector
5 switch.

1 25. The method of claim 16 further comprising consolidating network connectors for each
2 server into at least one consolidated network connector switch; connecting the consolidated
3 network connector switch to the host computer; selectively communicating between the host
4 computer and a server's network connector using the consolidated network connector switch.